

REMARKS

Claims 11-15, 17-19, 21-23, 25, 26, 51, 53, 56, 58-60, 64 and 65 are pending.

The Examiner rejected claims 19, 21-23, 25 and 26 under 35 USC § 112, first paragraph, stating that the original disclosure does not disclose that the annealed portion of the mandrel is spaced apart from an outer surface of an inner member and an inner surface of an outer member, and stating in the Response to Arguments section of the office action that contrary to the Applicant's assertion, figure 1B does not provide support for the *annealed* portion of the mandrel being spaced apart from the inner surface of the shaft outer member and the outer surface of the shaft inner member.

However, the Examiner appears to be interpreting figure 1B as illustrating only a distal nonannealed section of the mandrel. In fact, there is no indication that the transverse cross sectional view of figure 1B is limited to a nonannealed section of the mandrel. Figure 1B is not limited to a specific location on Figure 1A (Figure 1A does not have transverse cross sectional lines 1B-1B which would indicate a specific location of figure 1B). As a result, Figure 1B fully supports a claim limitation requiring that the mandrel is between and spaced apart from the surfaces of the inner and outer tubular members, which in combination with the disclosure that the mandrel has an annealed section, fully supports claim 19 requiring a mandrel with an annealed section between and spaced apart from the surfaces of the inner and outer tubular members.

The Examiner rejected claims 11-15, 17, 18, 51, 53, 56, 58-60, 64 and 65 under 35 USC § 103(a) as being unpatentable over Evard (US 5,242,396) in view of Chiu et al. (6,224,535) and further in view of Wantink et al. (6,178,810), stating, in part, that Evard

discloses the invention substantially as claimed except for the proximal section of the mandrel being annealed, and does not teach that the plastic material is PEEK, but Chiu et al. teaches a mandrel made of PEEK, and Evard teaches adhesive bonding the proximal end of the mandrel and does not list annealing as a suitable bonding means, but Wantink et al. teaches that polymeric materials may be secured together by heat and fusion bonds and adhesives, so that it would have been obvious that heat fusion is a functional equivalent to adhesives for bonding a polymeric mandrel to a catheter.

The Examiner states in the Response to Arguments section of the office action that Applicant's arguments are not persuasive because Applicant's claims do not preclude the annealed section from being coextensive with a fusion bonded end section, and thus, the heat fused proximal end of the mandrel [of the combined references] is considered the claimed "bonded proximal end section" and the coextensive remainder of the heat fused mandrel is considered the claimed "annealed proximal section".

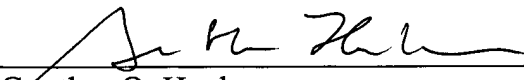
However, Applicant's claims 11 and 51, as amended, clarify that the annealed proximal section distal to the bonded proximal end section of the mandrel is a nonbonded section (claim 1) or is not coextensive with the bonded end section (claim 51). The claims therefore do preclude the annealed section from being coextensive with a fusion bonded end section of the mandrel. Unlike the mandrel of Evard in view of Chiu et al. and further in view of Wantink et al. as set forth by the Examiner, Applicants disclose an embodiment in which a proximal portion of the mandrel is annealed independently of any heating that may occur as a result of fusion bonding the proximal end of the mandrel. For example, Applicants disclose an embodiment in which a mandrel is secured at the

proximal end of the mandrel within the proximal adapter mounted at the proximal end of the catheter (see page 3, lines 15-17), and disclose that varying the stiffness, e.g., by annealing, along the length of the mandrel can provide for stiffness in a proximal section of the catheter required for pushability, without making the proximal section of the shaft out of a stiff polymer since a stiff polymer shaft kinks easily during manipulation of the catheter into the desired position in the patient (see page 8, line 14-page 9, line 13). The annealed proximal section of Applicant's mandrel is clearly proximal to, and independent of, any heating caused by bonding the proximal end of the mandrel. Thus, the portion of the mandrel which is bonded is clearly disclosed as a portion which is discrete and different from the annealed section of the mandrel, and not coextensive therewith unlike the mandrel of the combined references as set forth by the Examiner. As set forth in MPEP §2163.07, a rewording where the same meaning remains intact is permissible. Thus, although the specification as filed does not contain the phrase "nonbonded", by clearly describing the annealed proximal section as discrete different from the bonded proximal end of the mandrel (see page 3, lines 15-21), the specification supports the nonbonded annealed proximal section of the embodiment of claim 11. Similarly, the Examiner's attention is directed to original claim 5 which sets forth a mandrel (i.e., "rod") having a proximal section annealed to induce a higher crystallinity such that the proximal section is stiffer than the distal section. Original claim 5 recites the mandrel independently of a catheter, and, although not precluding a catheter or adapter bonded to the mandrel, thus recites an independent mandrel with a proximal section which has a length which is both annealed and nonbonded therealong.

In light of the above amendments and remarks, applicants respectfully request reconsideration and issuance of a timely Notice of Allowance.

Respectfully submitted,

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